

## **MEDIA DELIVERY USING QUALITY OF SERVICE DIFFERENTIATION WITHIN A MEDIA STREAM**

### **ABSTRACT OF THE DISCLOSURE**

5           A WLAN system adapted to apply QoS differentiation to a media stream to be transmitted from a transmitting station (STA) to a receiving STA of that system. The transmitting STA processes the media stream to generate a base sub-stream and one or more enhancement sub-streams for subsequent transmission over a wireless communication channel and assigns different priorities to different sub-streams. Depending on the channel conditions, the transmitting STA  
10 may select to discard, without transmission, portions of data from enhancement sub-streams. The selection process is based on the assigned priority and operates to preserve as much of relatively high-priority data as possible. The receiving STA then processes the received data to generate a reconstructed media stream, which provides signal quality equal to or better than the signal quality supported by the base sub-stream. Advantageously, a WLAN system of the invention is adapted  
15 to change signal quality dynamically and incrementally in a manner commensurate with current channel conditions without the need for communication between the higher and lower network layers. In addition, it provides gradual and graceful degradation of signal quality when channel conditions deteriorate as opposed to abrupt degradation inherent in analogous prior art systems.